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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/912,131	07/24/2001	Tse-Hua Lan	US 010337	4022

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PHILIPS INTELLECTUAL PROPERTY & STANDARDS  
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EXAMINER

DANG, DUY M

ART UNIT PAPER NUMBER

2621

DATE MAILED: 01/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

09/912,131

**Applicant(s)**

LAN ET AL.

**Examiner**

Duy M Dang

**Art Unit**

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,3-5,7-9,11-13 and 15-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3-5,7-9,11-13 and 15-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10-04-2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |  |
|---|--|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____  |

### DETAILED ACTION

1. Applicant's amendment filed 8/31/04 has been entered made of record.
2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 3-5, 7-9, 11-13, and 15-20 are rejected under 35 U.S.C. 102(b) as being anticipated by [Boyce et al. [US Patent No. 6,025,878. Art of record, IDS filed 10/04/02].

Regarding claim 1 as a representative claim, Boyce teaches a method for decoding video [i.e., the illustrated decoder 100 of figure 1 and mentioned in col. 4 lines 60-65], comprising the steps of:

reducing a number of transform coefficients in B-frames to produce reduced B-frames [i.e., the preparser 112 of figure 1 and text portion mentioned in col. 6 line 61 to col. 7 line 6.

Note that preparser 112 performs removal of AC DCT coefficient on B-frames to produce reduced B-frames];

performing inverse quantization on the reduced B-frames [i.e., the inverse quantization circuit 122 in figure 1. Note this inverse quantization performs inverse-quantized on the reduced B-frames which are outputted from preparser 112]; and

performing an inverse transform on the reduce B-frames [i.e., the inverse DCT circuit 124 in figure 1] wherein the reduced B-frames are produced by: (1)identifying blocks associated with the B-frames [see col. 6 lines 20-28. Note that this cited text portion refers to identifying blocks associated with the B-frames by the preparser 112] and (2)selecting transform coefficients

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included in a predetermined area of the blocks associated with the B-frames [see col. 5 lines 63-65, col. 6 lines 20-28, col. 6 line 61 to col. 7 line 6 and figures 3A-3D. Note that an "X" array i.e. 4x4 pixels array shown in figure 3A represents the selected transform coefficients in a predetermined area of the blocks associated with the B-frames. In addition, the use of the first two columns coefficients included in the 8x8 coefficient array mentioned in col. 17 lines 13-120 qualifies as the claimed features].

While Boyce does not explicitly teach inverse scanning, Boyce does teach zig-zag scanning used in the DCT compression system according to column 7 lines 7-13. Thus, the inverse zig-zag scanning is inherently included in Boyce in order to for the decoder 100 to perform decompression the compressed video stream.

Regarding claim 3, while Boyce does not explicitly teach inverse zig-zag scanning, Boyce does teach zig-zag scanning used in the DCT compression system according to column 7 lines 7-13. Thus, the inverse zig-zag scanning is inherently included in Boyce in order to for the decoder 100 to perform decompression the compressed video stream..

Regarding claim 4, Boyce further teaches wherein the inverse transform is an inverse discrete cosine transform [i.e., inverse DCT circuit 124 in figure 1].

The advanced statements as applied to claims 1, 3-4 above are incorporated herein. With regard to claims 5, 7-8, Boyce further teaches a memory medium including code for decoding [i.e., coded data buffer 116 of figure 1 and mentioned in col. 6 lines 38-40].

Regarding claims 9, 11-13, and 15-16, it is noted that those apparatus claims recite corresponding features called for in method claims 1 and 3-4. Thus, claims 9, 11-13, and 15-16 are also rejected for the same reasons as set forth in claims 1, and 3-4 above.

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Regarding claims 17-20, Boyce further teaches the predetermined area is either a 1x8 area or 2x8 area [see col. 17 lines 13-20. Note the use of two columns of 8x8 coefficient array refers to 2x8 area].

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 17-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Boyce et al. [US Patent No. 6,025,878. Art of record, IDS filed 10/04/02].

The advanced statements in paragraph 4 with regard Boyce et al as applied to claims 1, 3-5, 7-9, 11-13, and 15-16 above are incorporated herein.

Regarding claims 17-20, While Boyce further teaches the predetermined area is a 2x8 area [see col. 17 lines 13-20. Note the use of two columns of 8x8 coefficient array refers to 2x8 area], Boyce et al fails to expressly teach the predetermined area is a 1x8 area.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to use 1x8 area. Applicant has not disclosed that 1x8 area provides an advantage, is used for a particular purpose or solves a stated problem. One of ordinary skill in the art, furthermore, would have expected Applicant's invention to perform equally well with either the 2x8 area taught by Boyce et al or the claimed 1x8 area because both area perform the same function of reducing coefficients included in B-frame.

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Therefore, it would have been obvious to combine to one of ordinary skill in this art to modify Boyce et al to obtain the invention as specified in claims 17-20.

6. Applicant's arguments filed 8/31/04 have been fully considered but they are not persuasive.

In reply to Applicant's remarks that "Boyce et al. does not disclose selecting transform coefficients included in a predetermined area of the blocks associated with the B-frames" (see last paragraph of page 7). The examiner respectfully disagrees because Boyce et al. does teach these claimed features. Boyce et al teaches generating reduced B-frames by removing high AC coefficients in B-frames [see col. 6 line 61 to col. 7 line 6]. The remained coefficients refer to the so called "coefficients selected" and the area included in the B-frames that the remained coefficients are occupied refers to the so called "predetermined area". In addition, in figure 3A of Boyce et al, for example, the "X" array i.e., 4x4 array including "X" coefficients on the upper left corner of the 8x8 array, refers to these claimed features.

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

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however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Duy M Dang whose telephone number is 703-305-1464. The examiner can normally be reached on Monday to Friday from 5:30AM to 2:00PM..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Leo H Boudreau can be reached on 703-305-4706. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



dmd  
1/3/0/04



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